Vent-Free Gas Fireplaces
Models: UV36RN, UV36RP

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING HEATERS

IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

— Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

— What to Do If You Smell Gas

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to Page 4.

Homeowner's Installation and Operating Instructions

UL® LISTED
Gas Fired Unvented Room Heaters
MH17022

Models with "N" after the model number use natural gas; models with "P" after the model number use Propane (LP) gas.

INSTALLER: DO NOT DISCARD THIS MANUAL - Leave in fireplace for homeowner.

20007436 3/06 Rev. 5

Table of Contents

This book contains your operating and installation instructions and should be kept in a safe place. For you to realize all the advantages and use of the reliable service that has been engineered into your fireplace, you must carefully follow all of the instructions contained in this book regarding installation and operation of the fireplace.
These instructions should be read carefully in their entirety before beginning installation of the fireplace.
It is suggested that you wear work gloves and safety glasses to protect your hands and eyes when installing your fireplace.

NOTE: Authorities having jurisdiction (i.e. building inspectors, fire marshals, etc.) should be consulted before installation to determine the need to obtain a permit.

FAILURE TO FOLLOW THESE INSTRUCTIONS WILL VOID YOUR WARRANTY AND MAY PRESENT A FIRE HAZARD.

Important Information 3
Fireplace Dimensions 4
Provision for Adequate Combustion and Ventilation Air 5
Installation & Operating Instructions
- Locating the Fireplace 7
- Gas Line 7
- Drafts 7
- Fan Kit 7
- Electrical Services 7
- Framing Clearances 7
- Clearances 8
- Installation 9
- Gas Connection 10
- High Altitude Installation 10
- Gas Pressure Check 11
- Gas Pipe Sizing Chart 11
- Log Installation 12
- Log Assembly 12
- Installation of Optional Wireless Remote 13
- Installation of Millivolt Wall Switch 13
- Lighting Instructions 14
- Match Lighting 15
- Flame Check 15
- Finishing the Fireplace 15
- Managing Heat Output 16

Maintenance
- Cleaning 17

Troubleshooting 18
- Servicing 18

Replacement Parts 19
Warranty 21

UV36RN, UV36RP
Certified To
ANSI Z 21.11.2-2000
Unvented Room Heaters

Units: GF1VA2, GF1VB2

Important Information

INSTALLER: Please leave these instructions with the owner.

OWNER: Please retain these instructions for future reference.

IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY BEFORE OPERATING.

WARNING: Any change to this heater or its controls can be dangerous.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

NOTES

- **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
- Installation and repair must be done by a qualified service person or gas appliance installer.
- A fireplace screen must be in place when the appliance is operating. On models with movable screens, the screens must be closed when the fireplace is operating.
- The appliance must be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, dust and pet hair, etc. It is important that the control compartment, burners and circulating air passageways of the appliance be kept clean.
- **DO NOT place clothing or other flammable material on or near the appliance.**
- This appliance must only be used with pressures at the inlet as shown in Table 1, Page 11 in installation instructions.
- The installation must conform with local codes or, in the absence of local codes, with the NATIONAL FUEL GAS CODE, ANSI Z223/NFPA 54, latest edition.
- Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.
- The appliance and its appliance main gas shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kpa).
- The appliance must be isolated from the gas supply piping system by closing its equipment shut-off valve during any testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kpa).
- **DO NOT** use this heater in recreational vehicles, bedrooms or bathrooms.
- **If this is the ONLY gas appliance, we recommend a minimum 200 pound cylinder with a fill gauge. Use of a 100 pound cylinder is not recommended. Other household gas appliances may require the tank size to be larger. Do not operate the vent-free heater if the fuel level in the propane tank is below 1/4 full.**
- Use only with two-stage regulator.
- **DO NOT** use this heater if any part of it has been under water. Immediately call a qualified technician to inspect the appliance and replace any part of the control system and any gas control which has been under water.
- This appliance may be installed in an after-market* manufactured “mobile” home where not prohibited by state or local codes.

*After-market: Completion of sale, not for purpose of re-sale from the manufacturer.

- Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
- **Although your gas logs are very realistic in appearance, it is not a real wood-burning fireplace and must not be used for burning solid fuel.**
- To avoid irreparable damage to the appliance or personal injury; matches, paper, garbage or any other material must not be placed or thrown on top of the logs or into the flames.
- **To avoid personal injury, do not touch hot surfaces when the appliance is operating.**
- **Close supervision is necessary when the appliance is being operated near children.**
- Do not use to cook food.
- This appliance is intended to be used only for supplemental heat. **Do not use it routinely as a primary heat source.** Continuous operation could produce excessive humidity depending on construction characteristics and outdoor temperatures (below 20°F). Over time, this could cause condensation to form and damage wall structures and exterior paint.
- An unvented room heater having an input rating of more than 10,000 btu per hour shall not be installed in a bedroom or bathroom.

WARNING: Do not install televisions or other electronic devices above this fireplace unless approved by the electronics manufacturer.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

WARNING: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas code, ANSI Z223.1/NFPA 54, section 5.3 or applicable local codes.

WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.

WARNING: During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches and eye/lung irritation. This is a normal and temporary occurrence.

Fireplace Dimensions

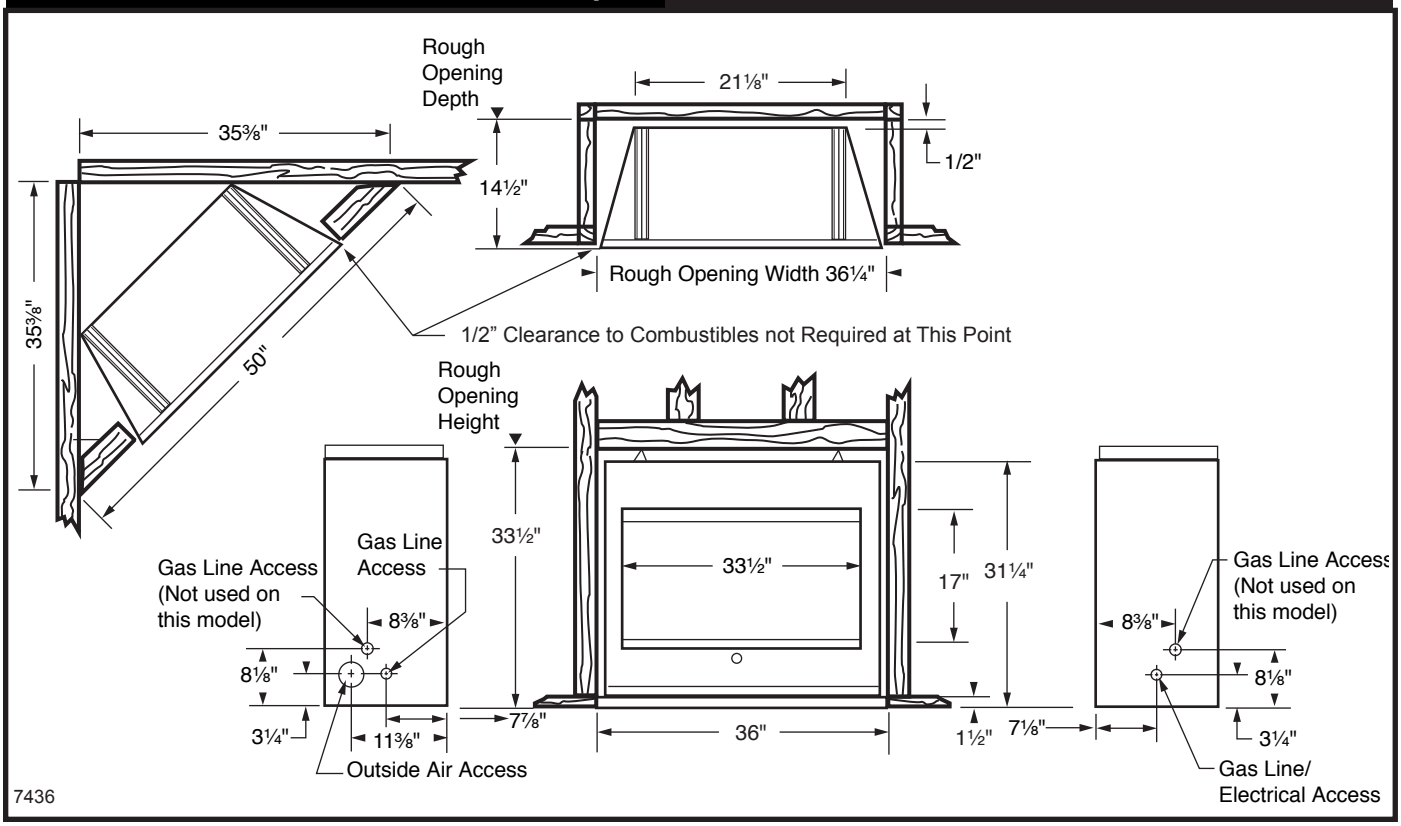


Fig. 1 UV36RN/RP specifications and framing.

WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame pattern.

WARNING: Any glass doors on an unvented room heater shall be opened when the appliance is in operation.

Provisions for Adequate Combustion and Ventilation Air

Today's homes are built more energy efficient than ever. New materials, increased insulation and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as air tight as possible.

While it is good to make your home energy efficient, you need fresh air. All fuel-burning appliances need fresh air for proper combustion.

Supplying Adequate Ventilation

This appliance must be installed in an unconfined space.
The National Fuel Gas Code's definitions for confined and unconfined spaces are as shown below.

The National Fuel Gas Code, ANSI Z223.1/NFPA 54 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

Determining if You Have a Confined or Unconfined Space

Use this worksheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install heater plus any adjoining rooms with doorless passageways or ventilation grilles between the rooms.

1. Determine the volume of the space (length x width x height).
   Length x Width x Height = _____cu. ft. (volume of space)
   Example: Space size 25' (length) x 25' (width) x 8' (ceiling height) = 5,000 cu. ft. (volume of space)
   If additional ventilation from adjoining room(s) is supplied with grilles or doorless openings, add the volume of these rooms to compute the total volume of the applicable space.
2. Divide the space volume by 50 cubic feet to determine the maximum BTU/Hr the space can support.
   _____(volume of space) ÷ 50 cu. ft. = (Maximum BTU/Hr the space can support.
   Example: 5,000 cu. ft. (volume of space) ÷ 50 cu. ft. = 100 or 100,000 (maximum BTU/Hr the space can support)
3. Add the BTU/Hr of all gas burning appliances in the space.

Gas range	_____	BTU/Hr
Vented gas heater	_____	BTU/Hr
Gas fireplace logs	_____	BTU/Hr
Other gas appliances* +	_____	BTU/Hr
Total =	_____	BTU/Hr
Example: Gas range	60,000	BTU/Hr
Vent-free logs +	29,000	BTU/Hr
Total =	89,000	BTU/Hr

*Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum BTU/Hr the space can support with the actual amount of BTU/Hr used.
   _____ BTU/Hr (maximum the space can support)
   _____ BTU/Hr (actual amount of BTU/Hr used)

Example: 100,000 BTU/Hr (maximum the space can support) 89,000 BTU/Hr (actual amount of BTU/Hr used)

The space in the above example is an unconfined space because the actual BTU/Hr used is less than the maximum BTU/Hr the space can support. If the space had been confined, your options would be as follows:

A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grille between rooms. See Ventilation Air From Inside Building.
B. Install a lower BTU/Hr heater, if lower BTU/Hr size makes room unconfined.

Converting Confined Space to Unconfined Space

Additional volume to convert a confined to an unconfined space could come from an adjoining space. When using an adjoining space, you can provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 3, Figure 2), or remove the door into the adjoining room.

Ventilation air from outdoors for unusually tight construction.

WARNING: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3 or applicable local codes.

Unusually tight construction is defined as construction where:

a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm ($6x10.^{-11}$ kg per pa-sec-m^2) or less with openings gasketed or sealed and

b. weather stripping has been added on openable windows and doors.

c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air.

You may provide two permanent openings: one within 12” of the ceiling and one within 12” of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation for required size of ventilation grille or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

You may provide two permanent openings: one within 12” of the ceiling and one within 12” of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation for required size of ventilation grille or ducts.

WARNING: The optional blower kit is equipped with a three prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle.

WARNING: Air openings that provide fresh air from an adjoining unconfined space shall not be blocked or obstructed in any way. Installation of unit should allow a minimum of 2” clearance from any part of the heater to any of the ventilation openings.

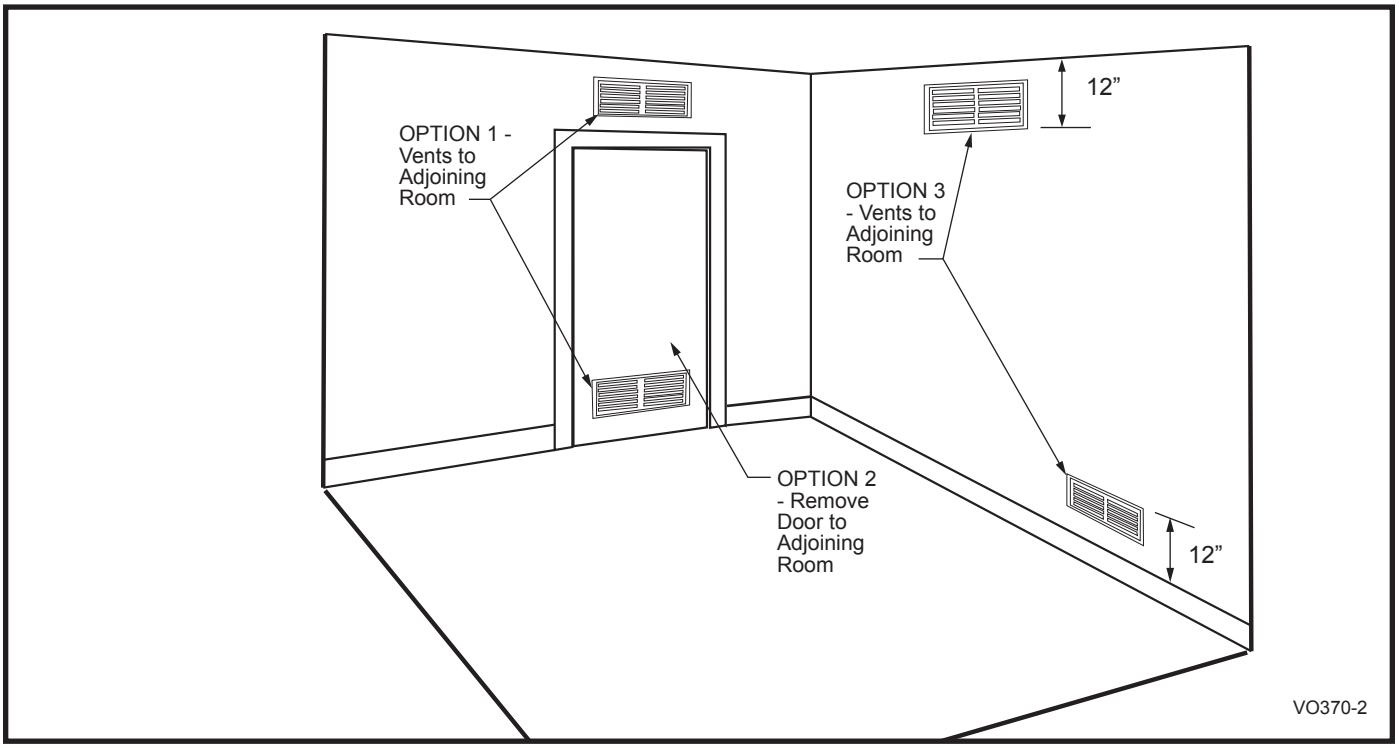


Fig. 2 Ventilation options for confined spaces.

Installation & Operating Instructions

Locating the Fireplace

Figure 3 shows some of the many ways your fireplace may be installed. Consider the traffic pattern in your room and the location of doors and windows. Moving air from ceiling fans, open doors and hot air grilles may cause the flames to soot. If a disturbance is found that affects the flames, it must be eliminated by turning off the ceiling fan, closing the door or closing/moving the hot air register. A corner location may be best where space is limited.

Your fireplace weighs no more than some of your fine furniture. If the fireplace is located near a load bearing wall, additional supports to the foundation will not be necessary.

NOTE: Heavy facings such as brick, stone, etc., may require additional foundation support.

NOTE: Although this unit may be installed on combustible surfaces, it must not be installed on carpet or vinyl.

The clearances to sidewalls and ceiling that are shown in Figures 5, 6a, 6b and 7 must be considered when choosing the location for the fireplace.

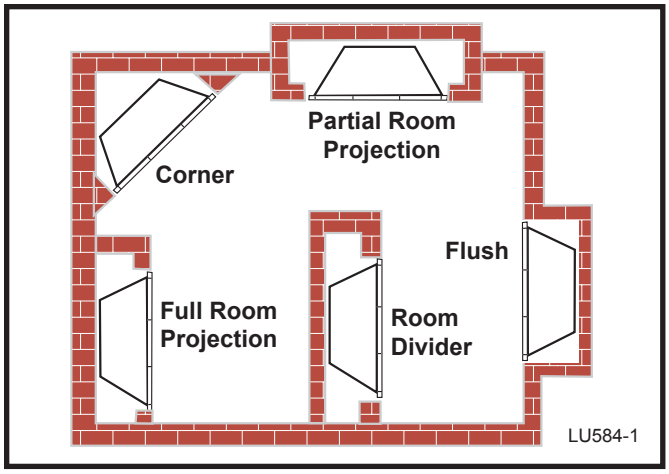


Fig. 3 Locating the fireplace.

Gas Line

The gas line must be installed by a licensed gas line installer before framing in the fireplace.

Drafts

Do not locate the fireplace in high traffic areas or areas exposed to high drafts and winds. Locate the fireplace away from furniture and draperies.

Fan Kit - Optional

If the construction of your fireplace is with a full outer casing and full bottom pan, use Blower Kit BL-4 or FK12.

If the construction of your fireplace is with two sheet metal legs supporting the combustion chamber at the back, use Blower Kit BL-3. The variable speed control, SCVS, is included with the BL-3.

Optional variable speed control, Model SCVS, may be used with the Blower Kit BL-4.

Electrical Services

All optional fan kits are equipped with a 120V, 60Hz blower, less than 12 amps.

A 120V outlet, Part no. EB-1, is needed in the fireplace in order to plug in the optional blower accessory. The blower is equipped with a standard 3-prong electrical plug.

Installation Tip: The blower will be easier to install if done at time of appliance installation.

Framing Clearances

The fireplace may be placed directly on a combustible floor, against a combustible wall at marked clearances or on a raised wooden platform.

If the fireplace is to be installed on a raised wooden platform, the platform must be a continuous level surface.

The fireplace must be secured in place so it cannot shift positions. The nailing flanges on the sides of the firebox make securing it to the framing easy. They were designed to allow the installation of 1/2” wallboard or plywood flush with the face of the fireplace.

Only the header (Fig. 4) may rest on the standoffs on top of the firebox. Framing must rest on top of standoffs.

When the fireplace is installed over carpeting, vinyl tile or any combustible material other than wood flooring, it must be installed on a metal or wood panel extending its full width and depth. Alternatively - the carpeting, vinyl tile, etc., may be removed from beneath the fireplace before installing.

Combustible materials must not be installed over or touch the black front surface of the fireplace.

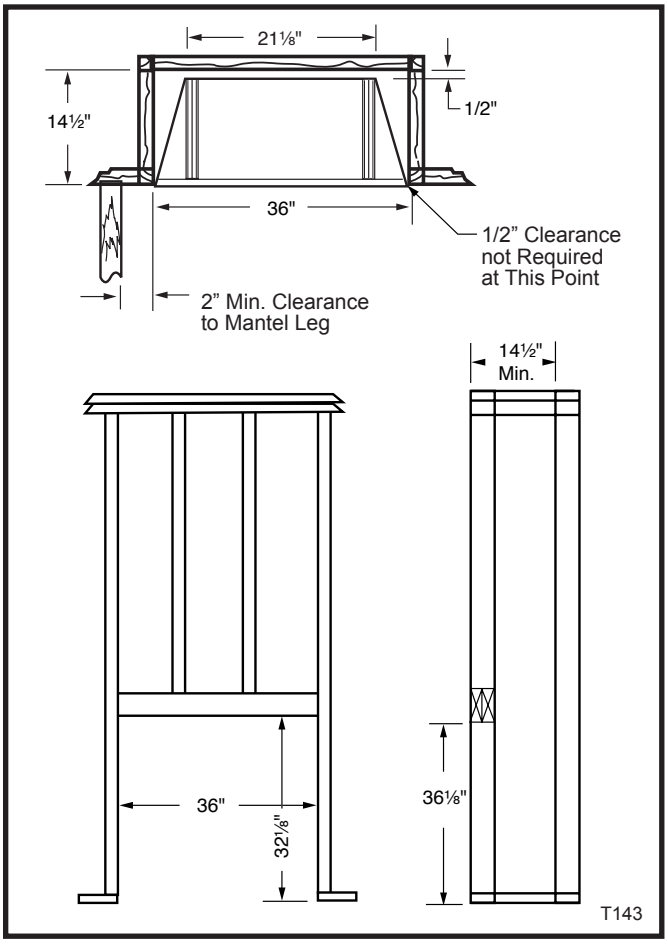


Fig. 4 UV36 framing dimensions.

Clearances

To ensure a safe installation, the following instructions must be carefully observed.

1. **Sidewall Clearances:** Clearances from the side of the fireplace opening to any combustible wall should not be less than 2".
2. **Ceiling Clearances:** The ceiling height should not be less than 36" from the top of the fireplace (Fig. 5a).

   Mantel Clearances:

   a. Mantel profile: The minimum distance above the fireplace opening to combustible material projecting 1" (tile moldings, breast boards, etc.) is 13". Combustible material projecting 6" (a mantel shelf, for example) requires a minimum clearance of 20¼" above the fireplace opening. Required clearance varies with the amount of projection. (Fig. 5a)

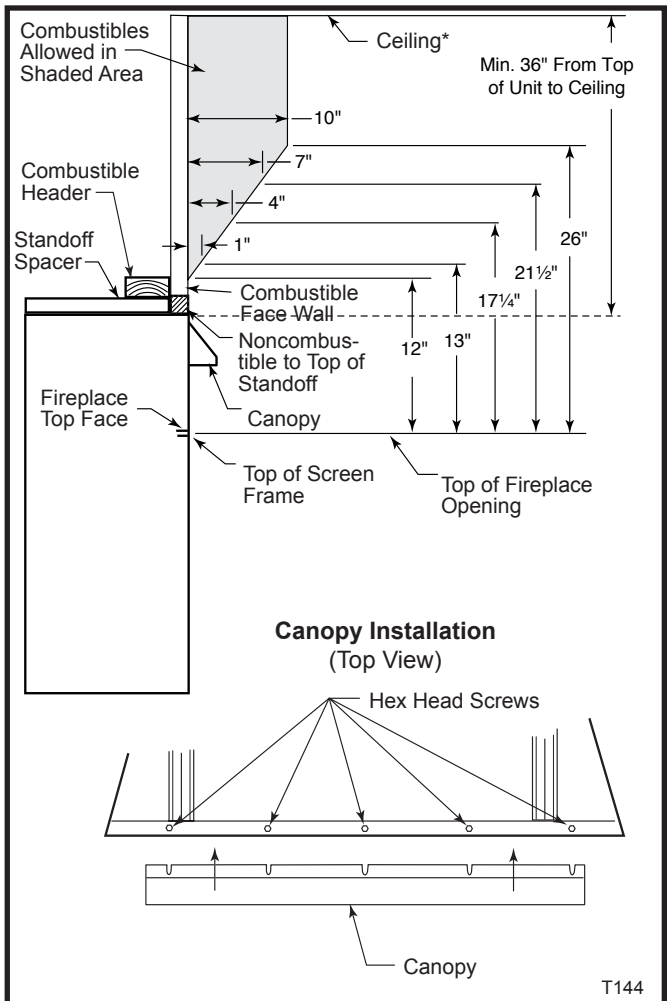
   The mantel profile must fall within the cross-section shown in Figure 5a (with standard canopy) or Figure 5b (if a AH3342 adjustable canopy is used).

   b. With Canopy: The minimum distance above the fireplace opening to combustible material projecting 1" (tile moldings, breast boards, etc.) is 9". Combustible material projecting 6" (a mantel shelf, for example) requires a minimum clearance of 12" above the fireplace opening. Required clearance varies with the amount of projection. (Fig. 5b)

   c. Heat resistant material: Any heat resistant material suitable for a continuos operating temperature of 120°C (248°F) must cover the wall surface directly above the fireplace opening and extend the full width of the fireplace opening for a distance of 9" above the opening of the fireplace. (Figs. 5a and 5b)

   d. Refer to Figure 6 for mantel leg clearances.

NOTE: Due to the continuous heat output of a Vent Free Fireplace, occasional discoloration or peeling of paint and varnish materials may be noticed directly above the fireplace opening.



*Ceiling height is the minimum height of the room ceiling in front of the fireplace measured from the top front edge of the fireplace.

Fig. 5a Minimum mantel clearance with standard canopy.

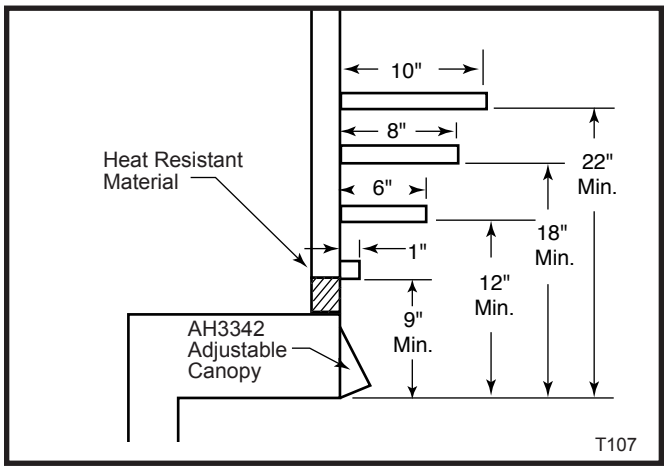


Fig. 5b Minimum clearances with AH3342 canopy.

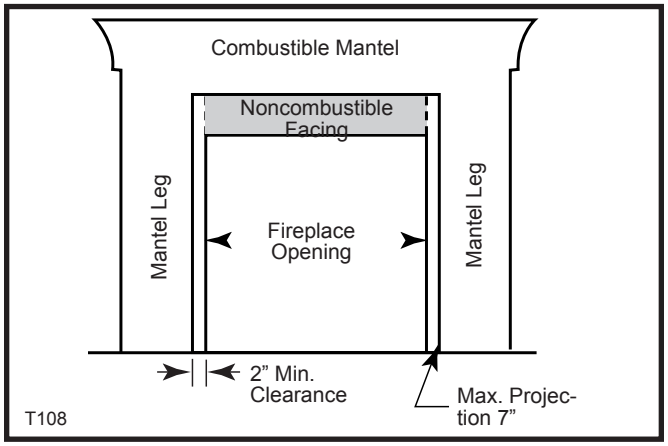


Fig. 6 Side clearance and projection.

This list of specific instructions will help you make certain that every installation operation is done correctly. Complete the installation steps in the sequence shown.

LOCAL BUILDING CODES SHOULD BE CONSULTED IN ALL CASES AS TO THE PARTICULAR REQUIREMENTS CONCERNING THE INSTALLATION OF FACTORY BUILT VENT FREE FIREPLACES.

Select the location for the fireplace by taking into consideration the factors previously outlined in the Planning Ahead section of this manual.

Step 1: Framing the Firebox

The entire fireplace can be elevated above the floor to achieve a raised hearth effect. This can be done by adding a small platform to achieve the desired height. **STOP! INSTALL CANOPY AT THIS TIME BY LOOSENING THE SCREWS LOCATED AT THE TOP FRONT OF THE FIREPLACE. NEXT, SLIDE THE SLOTTED FLANGE OF THE CANOPY UNDER THE LOOSENED SCREWS, THEN RETIGHTEN THE SCREWS TO SECURE THE CANOPY.** (Fig. 5a)

Step 2: Install the Firebox

Install the firebox into the framed opening by setting it directly in front of the opening and sliding it into the proper position.

Step 3: Level the Firebox

Check the level of the firebox on the top edge of the fireplace face. Shim if necessary.

Step 4: Secure the Firebox

Secure the fireplace to the framing. The nailing flanges on the firebox will make securing the firebox to the frame quick and easy. Use appropriate size nails or screws to secure the firebox.

Step 5: Removing the Front Screen Panel

To remove the screen panel, first open the control panel door. Using a 1/4" nut driver, remove the two screws that secure the screen panel to the front of the fireplace, (Refer to Figure 7 for the location). Carefully pull the bottom of the screen panel out toward you, then pull the panel down until the two pins at the top of the screen panel clears the holes in the top of the fireplace.

Reverse the above operation to reinstall the screen panel.

WARNING: The front screen on the fixed screen models must be installed before the fireplace is put into operation.

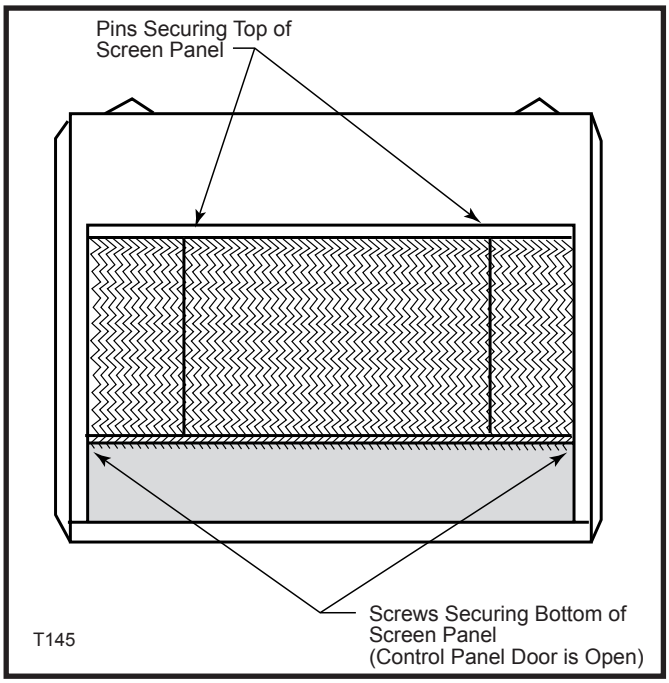


Fig. 7 To remove screen panel, remove two screws securing screen, then pull panel down until top pins clear holes in top of fireplace.

Gas Connection

Gas Specifications

		BTU/Hr	
Model	**Fuel**	**Hi**	**Low**
UV36RN	Natural	29,000	18,000
UV36RP	LP/Propane	29,000	23,000

Check Gas Type. Use only the gas type indicated on the heater's rating plate. If the gas type indicated on the plate is not your type of gas supply, DO NOT INSTALL. Contact your dealer for proper model.

Gas Piping. The gas supply line must be of an adequate size to handle the BTU/HR requirements and length of the run for the unit being installed.

Determine the minimum pipe size from the piping size chart on Page 10. The normal gas connection is 1/2" NPT made at the center of the unit.

WARNING
DANGER OF PROPERTY DAMAGE,
BODILY INJURY OR DEATH.

Make sure the heater is equipped to operate on the type of gas available. Models designated as natural gas are to be used with natural gas only. Heaters designated for use with liquified petroleum (l.p.) gas have orifices sized for commercially pure propane gas. They cannot be used with butane or a mixture of butane and propane.

Always use an external regulator for all LP appliances to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the regulator fitted to the heater.

WARNING: Connecting directly to an unregulated LP tank can cause an explosion.

All piping must comply with local codes and ordinances or with the National Fuel Gas Code (ANSI Z223.1/NFPA 54), whichever applies. Installation of a sediment trap is a requirement of this code.

Gas Connection. If installation is for L.P. gas, have L.P. installer use two-stage regulation and make all connections from the storage tank to the heater. Refer to the National Fuel Gas Code for the proper supply tank size with the Btu's/Hr requirements. If this is the ONLY gas appliance, we recommend a minimum 200 pound cylinder with a fill gauge. Use of a 100 pound cylinder is not recommended. Other household gas appliances may require the tank size to be larger. Do not operate the vent free fireplace if the fuel level in the propane tank is below 1/4 full.

Use pipe wrenches when making the connection to the valve to prevent turning or damage to gas valve.

WARNING
DANGER OF PROPERTY DAMAGE,
BODILY INJURY OR DEATH.

Never use a match or open flame to test for leaks. Never exceed specified pressures for testing. High pressures may damage the appliance regulator which would require replacement. Liquified petroleum (LP) is heavier than air and it will settle in any low area, including open depressions and it will remain there unless area is ventilatedNever attempt start-up of unit before thoroughly ventilating area.

Connection between the manual shut-off valve and the gas valve can be made with a CSA design certified flexible connector if allowed by local codes. A drip leg is still required. Tighten all joints securely.

NOTE: If the manual gas shut-off valve is located in the control compartment, the two screws that hold the control cover in place during shipping must be left out so the control cover is removable by hand.

Testing the Gas Piping. Test all piping for leaks. When checking gas piping to the heater with gas pressure less than 1/2 psi, shut off manual gas valve for the heater.

If gas piping is to be checked with the pressure at or above 1/2 psi, the heater and manual shut off valve must be disconnected during testing to prevent damage to the regulator on the unit, (see **WARNING**).

To ensure that the gas lines and connections do not have any leaks, a pressure test should be performed. **Only a qualified installer should perform the pressure test to ensure that the unit is not damaged by high pressures!** Apply soapsuds (or a liquid detergent) to each joint. Bubbles forming indicate a leak. Correct even the slightest leak at once.

If you connect **natural gas to an LP gas unit**, you may be unable to ignite the pilot. If the pilot does ignite, the front burner flame on the low setting will be bright blue but only 1/4" to 1/2" long and most likely lifting off the burner ports. If this is the case, turn the unit off immediately.

If you connect **LP gas to a natural gas unit**, the front burner flame on the low setting will be about 6" - 8" long. On the medium and high setting, the front burner flames will be bright yellow and about 10" in length. Turn the unit off immediately! If the unit is allowed to run in this condition, substantial amounts of soot will be generated and emitted into the house.

High Altitude Installation

CSA listed vent free gas fireplaces are tested and approved for elevations from 0 to 2,000 feet (0-610m) with no change to the rated input.

When installing this fireplace at an elevation above 2,000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input should be reduced four percent (4%) for each 1,000 feet above sea level, unless the heating value of the gas has been reduced, in which case this general rule will not apply. To identify the proper orifice size, check with the local gas utility.

Consult your local gas utility for assistance in determining the proper orifice for your location.

Gas Pressure Check

The gas inlet pressure specified in Table 1 is the pressure where the field-installed gas line connects to the gas control. This is measured at the inlet test port on the gas valve in the appliance. Ensure that pressure is as shown in Table 1.

The manifold pressure is controlled by a regulator built into the gas control and should be checked at the pressure test points located between the flame adjustment knob and the control knob at the front of the valve. The pressure connections accept 1/4" I.D. hose or tubing.

The pressure should be checked with the appliance burning on high (highest setting) and all other gas appliances turned on. One must then read the manometer and if pressures are not as specified in Table 1, then the inlet pressure must be adjusted.

After measuring the pressure, tighten the screw in the pressure test port and check for leaks. Replace the control box cover and the two screws.

Table 1

Gas Inlet Pressure	Natural	Propane
Max.	14.0" w.c.	14.0" w.c.
Normal	7.0" w.c.	11.0" w.c.
Min.*	4.5" w.c.	11.0" w.c.
Regulator Pressure	3.5" w.c.	10.0" w.c.

*Minimum inlet supply pressure for the purpose of input adjustment.

CAUTION: If the appliance's operating pressures are not checked and adjusted, improper combustion may result in soot being produced.

Gas Line Pipe Sizing

NOTE: To determine the size of the branch gas line from the main gas line to the fireplace, enter the tables below (for iron pipe or copper tubing) using the distance from the gas meter or second stage regulator to the furthest appliance on the gas system. Select a pipe or tube diameter which has enough capacity to meet the maximum input requirement of the fireplace. Regardless, do not use less than 1/2" diameter for the branch line. For any distances required longer than shown in these tables, refer to the National Fuel Gas Code.

NOTE: There may be a local gas utility requirement specifying a minimum diameter for gas piping. All units require a 1/2 inch pipe connection at the gas valve.

CAPACITY OF PIPING

Cubic Feet per Hour based on 0.3" w.c. Pressure Drop
Specific Gravity for Natural Gas - 0.6 (1000 BTU/Cubic Foot)
Specific Gravity for Propane Gas - 1.6 (2550 BTU/Cubic Foot)

Length of Pipe	Nominal Inches for Iron Pipe Sizes (1,000s BTU/hr)									
	1/2" D		3/4" D		1" D		1¼" D		1½" D	
	Natural	Propane	Natural	Propane	Natural	Propane	Natural	Propane	Natural	Propane
20'	92	143	190	296	350	546	730	1135	1100	1711
30'	73	115	152	237	285	444	590	918	890	1385
40'	63	97	130	202	245	380	500	778	760	1183
50'	56	87	115	179	215	334	440	683	670	1043
60'	50	79	105	163	196	304	400	622	610	949
70'	46	71	96	151	180	280	370	576	560	872
90'	40	61	84	130	160	250	320	497	490	763
100'	38	59	79	122	150	235	305	474	460	717

Outside Diameter Copper Tubing, Type L (1,000s BTU/hr)				
Tubing Length Feet	1/2" 0.43	5/8" 0.545	3/4" 0.666	7/8" 0.785
10	110	206	348	536
20	76	141	239	368
30	61	114	192	296
40	52	97	164	256
50	46	86	146	224
60	42	78	132	203
80	36	67	113	174
100	32	59	100	154

WARNING: Use only internally tinned copper tubing. If correct copper tubing is not used, tubing can deteriorate and develop gas leaks.

Log Installation

With gloves, remove each of the logs by gripping at either end while avoiding any undue pressure. The logs are made from light-weight ceramic fiber and may break if undue force is applied.

The carton contains the following items: front log and rear log, 2 top twigs, a bag of volcanic ash and a bag embers.

Log Assembly

(Refer to Figures 8, 9 and 10)

1. Rear log should be installed onto rear log supports. Match slots on rear of log with the vertical log bracket tabs. (Fig. 8)
2. Place the bottom edge of the large front log between the two tabs located in the log support channel which centers the log left to right. (Fig. 8)
3. The two top twigs can then be placed in their designated positions located with pins on back logs and grooves on the front log.
4. Lava rock from the bag provided should be placed on the hearth pan area to suit individual appearance preferences. **DO NOT** place volcanic ash on burner, pilot or logs.
5. Platinum embers are to be placed only on top of the front burner port area. Equally space embers one layer thick. **Do not pile ember material over one layer thick as this does not enhance the "ember" appearance or improve the log set performance.** (Fig. 10)
6. Flames must not impinge (touch) on logs.

WARNING: Do not use more embers than those supplied with your unit. Do not use embers other than genuine "Platinum Embers" supplied by CFM Corporation, Part No. 78037.

When you have completed these steps, compare log positions with Figure 9. The logs **must** be positioned as illustrated.

CAUTION: Proper location is critical. When positioning the log set, make sure the logs do not interfere with the sides of the fireplace before securing the chassis.

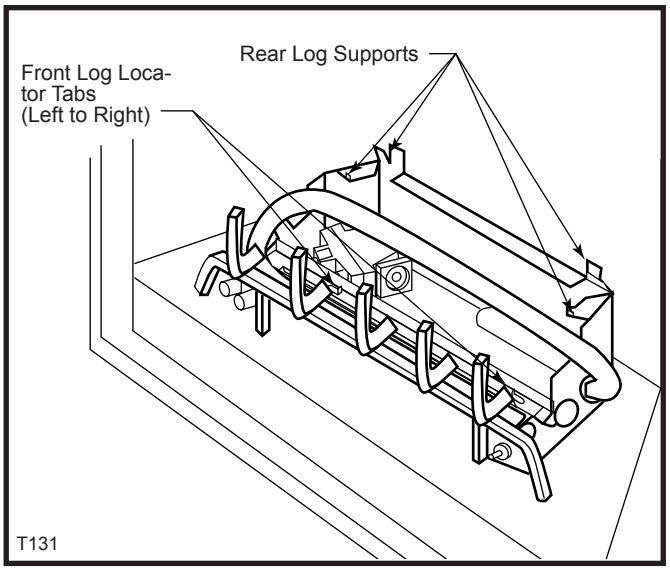


Fig. 8 Match slots on rear of log with vertical log bracket tabs.

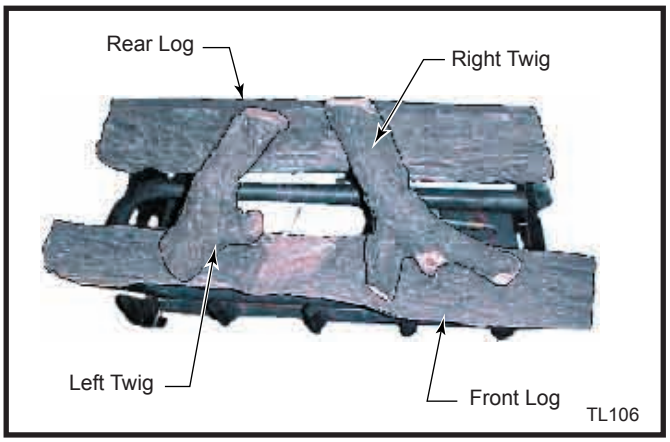


Fig. 9 Correct log placement.

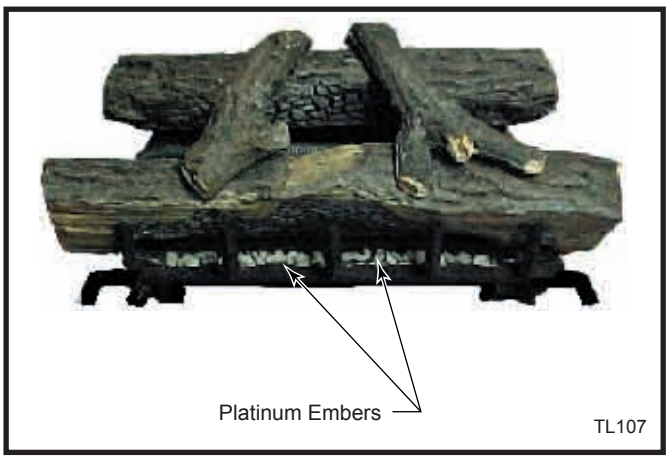


Fig. 10 Platinum ember placement.

WARNING: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

Installation of Optional Wireless Remote

Two remote control kits are offered. The standard ON/OFF model is a WRD-1 and the thermostatic model is a WRST-K.

The remote receiver should be placed in the lower compartment of the fireplace behind the control cover panel.

There will be a battery terminal and two wire leads. The remote receiver does not need to be secured to the fireplace but can be placed on the floor under hearth pan assembly.

The enclosed jumper wires can be attached to the receiver wires by joining the female connectors from the receiver.

All connections should be made as shown in the remote kit instructions. The jumper wire should be routed behind the cover plate to the valve. The wires from your receiver can be connected to the two outer terminals on the valve, making sure it is the two outer terminals and not the center one. (Figs. 11 and 12) You may now refer to the lighting instructions for use. The log set should not be modified to accept any other type of remote control as no guarantee may be made regarding proper function. Refer to manufacturer's instructions for battery replacement.

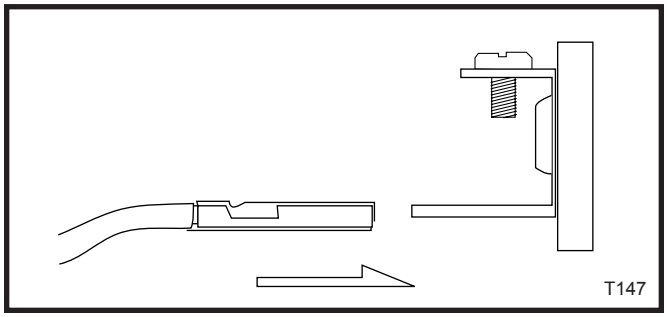


Fig. 11 Connect wires from receiver to terminals on valve.

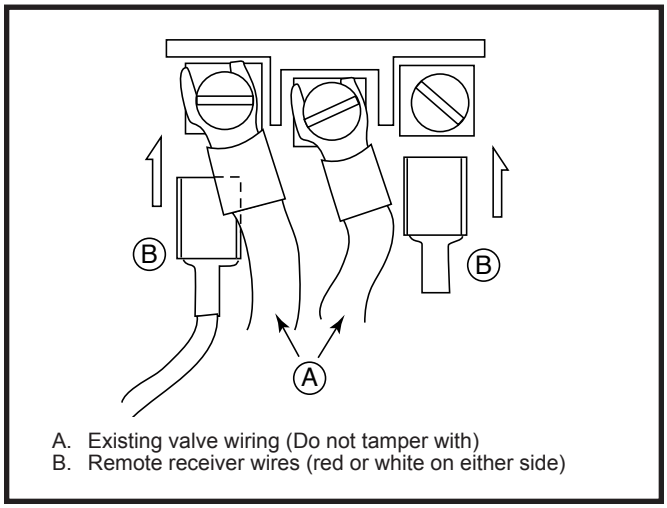


Fig. 12 Attach receiver wires to outer two terminals on valve.

Installation of Millivolt Wall Switch

To install your millivolt wall switch, an approved wall box should be installed in a location suitable to you. The thermostat wire should be routed from the wall box to the log set and should be routed underneath the log set and pulled up to the valve's wiring terminal as shown in Figure 14.

The two wires, letter "A", should not be removed or changed. Remove switch wires, Letter B. The two female ends of your wire can be connected to the two outer connections just below the screw terminals as shown in Figures 11 and 14.

Now the wall switch can be wired as shown in Figure 13. The wires can be connected to either poles as they carry only millivolt current. No ground is used at the wall switch. See the lighting instructions on Page 14. Wall switch must be for millivolt operation.

Do not connect 120 Volts to wall switch.

Recommended Maximum Lead Length (Double Wire) When Using Wall Switch or Thermostat

Wire Size	Maximum Length
14 ga.	50'
16 ga.	32'
18 ga.	20'
20 ga.	15'
22 ga.	10'

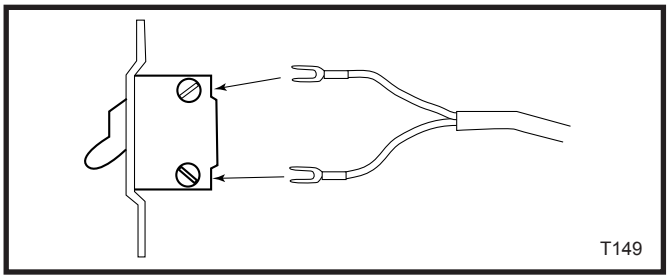


Fig. 13 Optional wiring to wall switch.

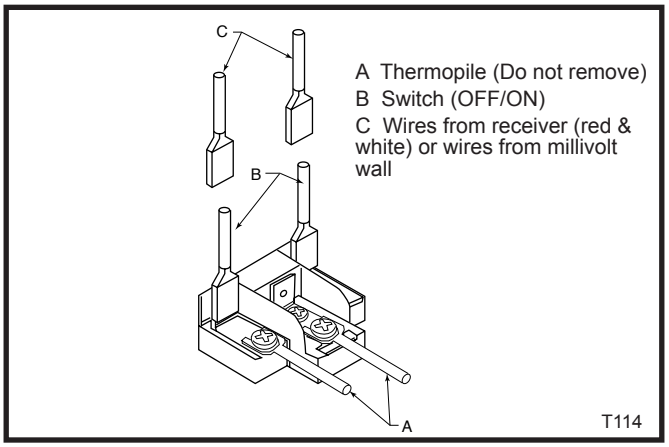


Fig. 14 Control valve terminal block.

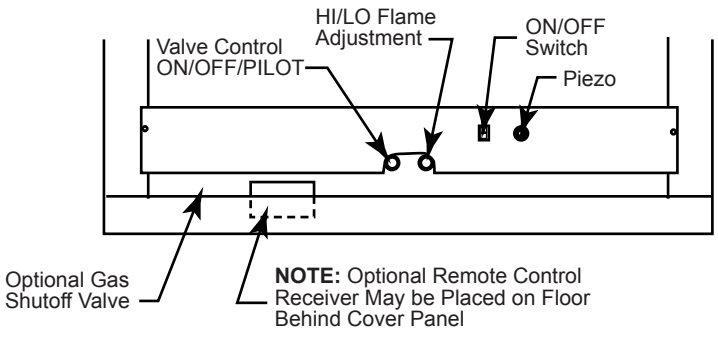


Fig. 15 Fireplace control panel.

For Your Safety, Read Before Lighting

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE OPERATION smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any telephone in your building.
- Immediately call your gas supplier from a neighbor's telephone.
- Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

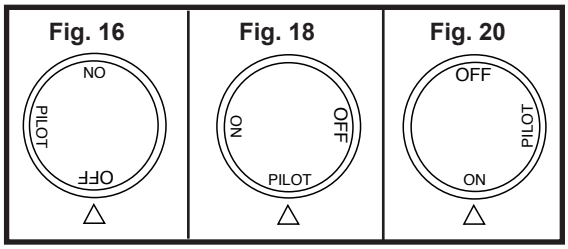
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may cause a fire or an explosion.

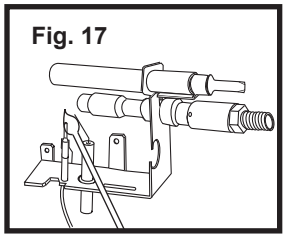
D. Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system or gas control which has been under water.

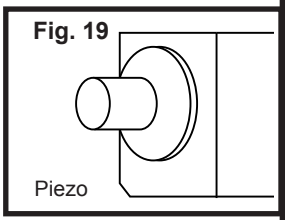
E. Be sure both the receiver and the remote have had a 9 volt battery installed in each.

Lighting Instructions

1. **STOP!** Read the safety information above before proceeding.
2. **Refer to Figure 16.** To turn off the gas supply, depress the knob slightly and turn clockwise ↷ to the OFF position.
3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.
4. **Refer to Figure 17.** Locate the pilot. It is at the right side of the burner.
5. **Refer to Figure 18.** Push in the control knob and turn counterclockwise ↶ to the PILOT position. Hold the control knob in for a few seconds.
6. While still holding in the control knob, press the ignitor pushbutton several times. This will cause a spark at the pilot which will ignite the pilot gas. (Fig. 19)
7. Hold the control knob for 60 seconds to prevent the flame failure detector from shutting off the gas while its probe is warming up.
8. Release the control knob.
   - If the knob does not pop up when released, stop and immediately call your service technician.
   - If the pilot will not stay lit after several tries, turn the gas control knob to OFF and call your service technician or gas supplier.
9. **Refer to Figure 20.** When the pilot remains lit, turn the control knob counterclockwise ↶ to the ON position.
10. Lighting Instructions for Millivolt Wall Switch. After the pilot is lit and the control knob is released, the wall switch can be switched to turn the unit "ON" or switched to turn it "OFF". Refer to Page 13 for wiring.







To Turn OFF Gas to Appliance

Depress the control knob slightly and turn it clockwise ↷ to the OFF position. **Refer to Figure 16.**

Match Lighting

If the pilot cannot be ignited with the piezo, it can be manually lit with the use of a match and lighter rod.

1. Place the match in the holder and light. With the right hand, depress and turn the control knob counterclockwise to the PILOT position. Hold in for 20 seconds.
2. Take the lighter rod and lighted match and ignite the pilot.
3. Continue to hold the control knob for an additional 20 seconds to ensure pilot is maintained.
4. Proceed with Step 8 in the Lighting Instructions on Page 14.

Flame Check

A periodic visual check of the flames should be made. The pilot flame should always be present when the appliance is in operation. (Fig. 21)

In normal operation (at full rate for approximately 15 minutes) the following flame appearance should be observed:

The flame should burn blue with some yellow flames visible. Height of the blue flame should be approximately 1" on high. The yellow flames should extend 6 to 8 inches above the large front log.

Typical flame shape seen in Figure 22.

NOTE: For your safety, the appliance is equipped with an oxygen depletion system. The system senses the oxygen in the atmosphere and switches off the gas supply in case the level of oxygen falls below a safe level. It must not be altered in any way.

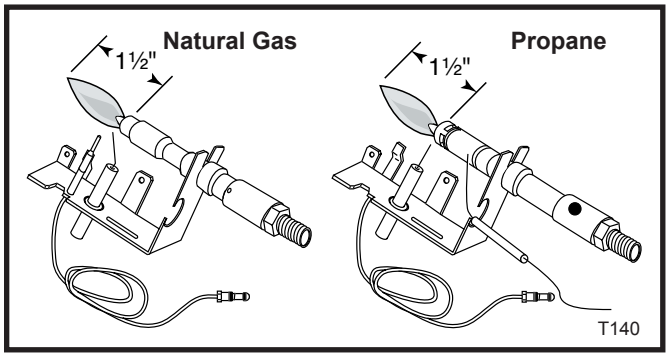


Fig. 21 Pilot flame position and location.

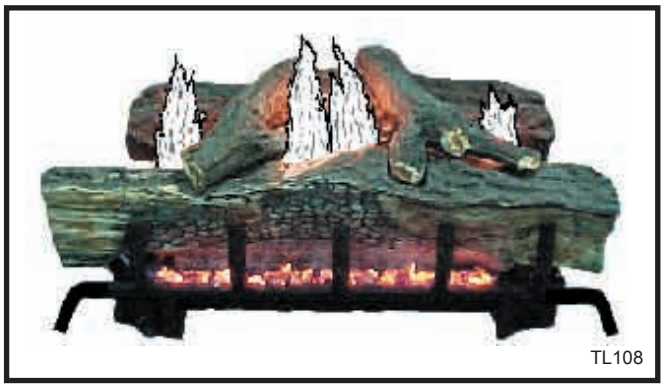
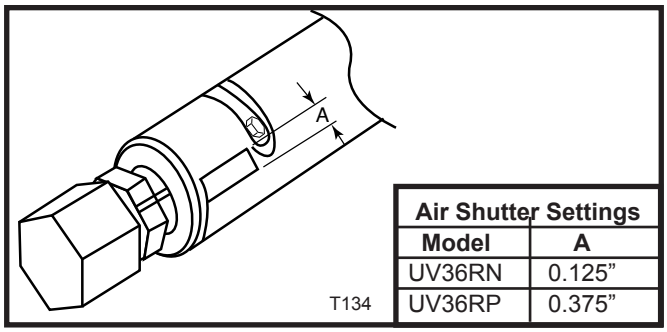


Fig. 22 Correct burner flame appearance.



Air Shutter Settings	
Model	**A**
UV36RN	0.125"
UV36RP	0.375"

Fig. 23 Air shutter settings.

Finishing the Fireplace

There are a wide variety of finishing materials available for your fireplace, from formal wall treatments with marble and mantels to rustic wood paneling, stone or brick.

It is important that the black face of the fireplace not be covered with any type of combustible material.

Noncombustible facing materials such as marble, brick or ceramic tile may overlap the black face of the fireplace up to the opening on either side of the fireplace. Seal all joints between the black fireplace face and the wall covering with a heat resistant material such as rock wool insulation or mortar. Be sure to use high temperature adhesive or mortar when anchoring brick, stone or tile to the face of the fireplace. Check to see whether man-made brick and stone are made of noncombustible materials before using them on the face of the fireplace. Some of these products contain combustible materials. Combustible wall coverings such a paneling or wallboard may not overlap the black face of the fireplace. The space between the wall covering and the fireplace should be sealed with a heat resistant material such as rock wool insulation or mortar.

NOTE: An "L" shaped steel lintel must be installed across the top of the firebox opening where facing materials such as brick or stone are used on the face of the firebox. It acts as a support/firestop. It should be attached to the face of the fireplace with screws and sealed to the fireplace with a heat resistant sealer. Refer to Figure 24 for finishing options.

WARNING: These vent free fireplaces are not to be used with glass doors.

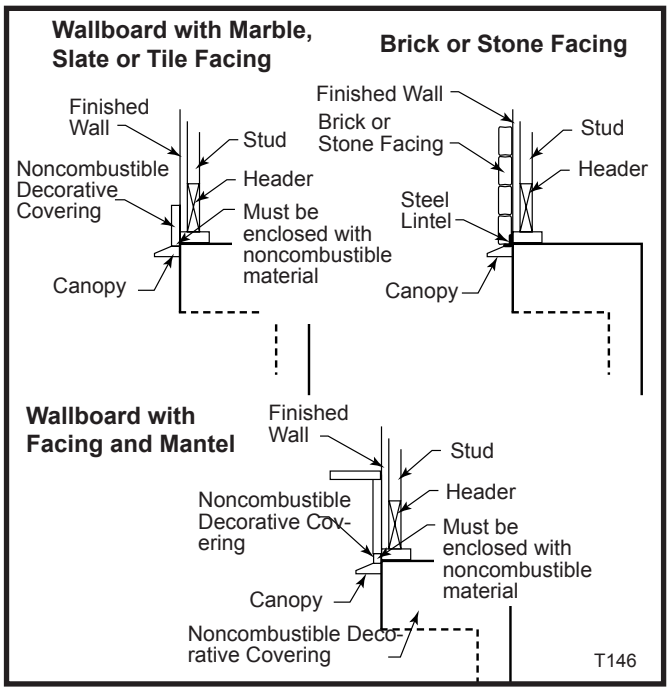


Fig. 24 Finishing options.

Managing Heat Output

The heat output from the appliance may be controlled by adjusting the main gas valve. Reference lighting instructions on Page 14 and chart on Page 10 which shows inputs at all settings.

The main gas valve may be adjusted anywhere between high and low to give the desired combination of flame aesthetics and heat output.

Maintenance

Cleaning

CAUTION: Before cleaning or moving logs or other parts of the unit, be sure to read the section on important safeguards.

Cleaning should be done before the logs are used each year and after long periods of non-use. Professional servicing is recommended.

All cleaning should be carried out when the appliance is cold.

Only limited cleaning will be required under normal use. Dusting the front grate or the control knob panel may be required occasionally. Do not use any cleaning fluids to clean the logs or any other part of the appliance.

If the flames show any unusual shapes or behavior, or if the burner(s) fail to ignite properly, then the burner holes may require cleaning. If this occurs contact your nearest dealer to get the appliance serviced.

Alternatively, the appliance can be cleaned by removing the logs. Handle the logs gently so as not to damage them. Always lift each log by holding it carefully at each end.

After the logs are removed allowing access to the burner area, use the brush attachment from your vacuum cleaner to carefully remove dust and loose particles from the base, logs and from around the burner. Gloves are recommended when handling the logs. Use extreme caution when cleaning around the pilot (ODS). The pilot should not be moved or altered from the original factory setting (Pilot to burner preset location). To clean the pilot, take an Air Duster can (computer cleaner compressed air) and insert the nozzle into the primary air inlet. Shoot a short blast of air into the inlet to clear dust. (Fig. 25) The burner should not be removed or taken out of it's locked and secure position (proper location of burners are critical).

Logs must be carefully replaced in their orignial, preset positions (Fig. 26), to prevent the rear flames from touching any log. No other arrangement is permitted. Incorrect placement can diminish combustion efficiency and cause sooting.

A qualified gas professional should periodically check and clean the orifices and burners per National Fuel Gas Code, Appendix B.

Lack of proper maintenance may void warranty.

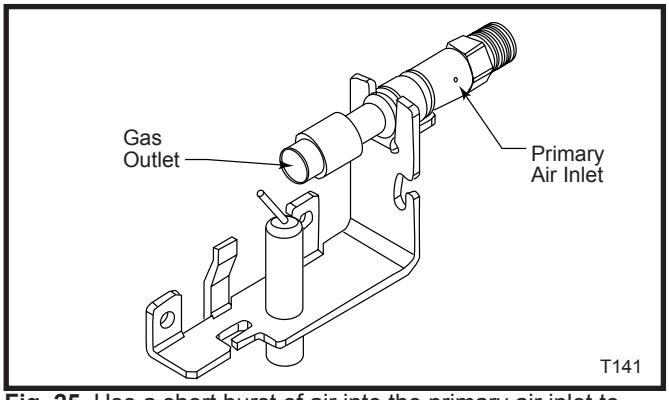


Fig. 25 Use a short burst of air into the primary air inlet to clean pilot.

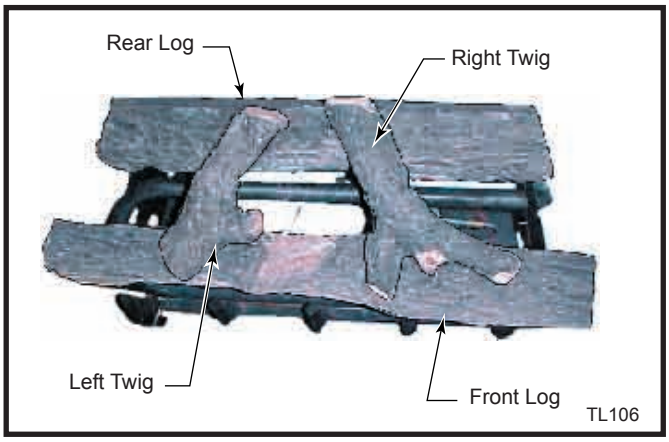


Fig. 26 Correct log placement.

Troubleshooting

With proper installation and maintenance, your new gas fireplace should provide years of trouble-free service. If you do experience a problem, refer to the trouble shooting guide below. This guide will assist you or a qualified service person in the diagnosis of problems and the corrective action to be taken. Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance. Use only a qualified service person when making repairs.

Symptom	Possible Cause	Corrective Action
1. Pilot will not light	Air in gas line	Purge gas lines and repeat ignition operation
	Low gas pressure	Check gas pressure
	Gas supply turned off	Turn on gas supply
	Blockage in gas line	Check gas passage way
	ODS pilot orifice is clogged	Call a qualified service person
	Control knob not in pilot position	Turn control knob to pilot position
	Control knob not pressed in while in pilot position	Press in control knob while in pilot position
Ignitor did not spark	Ignitor electrode positioned wrong	Correct electrode position
	Ignitor electrode broken	Replace assembly
	Ignitor cable pinched or broken	Free ignitor cable, if damaged replace it
	Ignitor cable not connected to ignitor	Connect cable to ignitor
2. Pilot will not stay lit	Partially clogged ODS pilot orifice	Contact qualified service person or your gas company
	Corrosion of thermocouple contact	Clean thermocouple contact
	Bad gas valve	Replace gas valve
	Control knob not pressed in long enough	After pilot lights, keep control knob pressed in for 60 seconds
	Thermocouple connection loose at gas control or damaged	Tighten connection finger tight + 1/4 turn or replace thermocouple or replace ODS pilot assembly
	Pilot flame not touching thermocouple	Contact a qualified service person
3. Main burner will not light	Low gas supply pressure	Contact your gas supplier
	Burner orifice clogged	Clean burner orifice
	Control knob not in ON position	Turn control knob to ON position
4. Heater shuts off on ODS	Not enough fresh air is available	Open window
	Low gas pressure	Contact your gas supplier
	ODS pilot partially lit	Contact a qualified service person
5. Sooting	Low gas pressure	Contact your gas company
	Clogged air intake/orifice	Contact service agent for cleaning
	Flame impingement	Insure no air currents are around appliance
	Logs misplaced	Refer to installation instructions for proper log placement

Servicing

Repair and replacement work should only be done by a qualified service technician.

Always shut off the gas supply and make sure the appliance is cool before beginning any service operation.

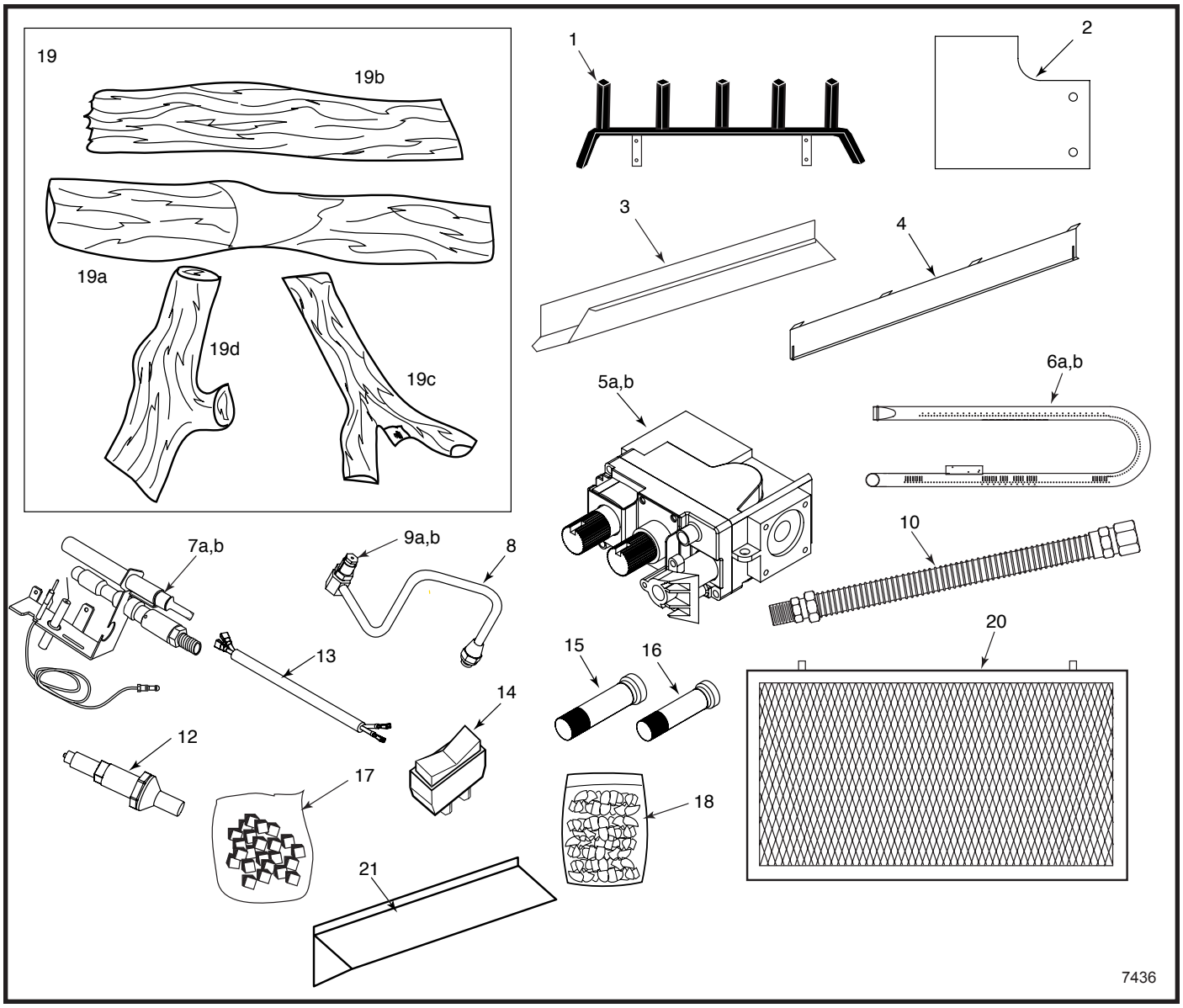
Always check for gas leaks after servicing.

Repair Parts

Always include the correct name, part number, model number, control type and serial number of the appliance when ordering service parts. Refer to the parts list below.

Use manufacturer's authorized parts only. If you desire to communicate with the factory, write to Customer Service at:

CFM Corporation
2695 Meadowvale Blvd.
Mississauga, Ontario
Canada L5N 8A3



CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

UV36RN, UV36RP

Ref.	Description	UV36RN	UV36RP
1.	Grate Assembly	78442	78442
2.	Side Deflector	78443	78443
3.	Support Channel	78439	78439
4.	Air Scoop	78445	78445
5a.	Valve - Natural	78126	-
5b.	Valve - LP/Propane	-	78127
6a.	Burner - Natural	78474	-
6b.	Burner - LP/Propane	-	78473
7a.	Pilot - Natural (OP)	78167	-
7b.	Pilot - LP/Propane (OP)	-	78169
8.	Manifold Tube Split Nut	78449	78449
9a.	Orifice #38 - Natural	78450	-
9b.	Orifice #52 - LP/Propane	-	78625
10.	Tube, Flexible Gas Inlet	71598	71598

UV36RN, UV36RP (continued)

Ref.	Description	UV36RN	UV36RP
11.	Tube, Pilot 3/16”	71221	71221
12.	Ignitor, w/Nut (Piezo)	65180	65180
13.	Wire Assembly Rocker Switch	78596	78596
14.	Mini Rocker Switch	PCOA049	PCOA049
15.	Knob Extension On/Off (3”)	77958	77958
16.	Knob Extension Hi/Lo (3”)	77959	77959
17.	Embers, Platinum (Bag)	78037	78037
18.	Lava Gravel Assy	68688	68688
19.	Log Set Assembly	77282	77282
19a.	Front Log	76895	76895
19b.	Back Log	75317	75317
19c.	Log, Right Twig	75318	75318
19d.	Log, Left Twig	75319	75319
20.	Screen Panel Assy	78924	78924
21.	Canopy, ADF33	71653	71653

LIMITED LIFETIME WARRANTY

PRODUCT COVERED BY THIS WARRANTY

All Vermont Castings gas stoves, gas inserts, and gas fireplaces, and all Majestic or Northern Flame brand gas fireplaces equipped with an Insta-Flame Ceramic Burner, or standard steel tube burner.

BASIC WARRANTY

CFM Corporation (hereinafter referred to collectively as the Company) warrants that your new Vermont Castings or Majestic Gas Fireplace/ Stove is free from manufacturing and material defects for a period of one year from the date of purchase, subject to the following conditions and limitations.

EXTENDED LIFETIME WARRANTY

The heat exchanger, where applicable, and combustion chamber of every Vermont Castings or Majestic gas product is warranted for life against through wall perforation. All appliances equipped with an Insta-Flame Ceramic Burner have limited lifetime coverage on the ceramic burner plaque. Warrantees are made to the original owner subject to proof of purchase and the conditions and limitations listed on this Warranty Document

COMPONENT WARRANTY

CAST IRON: All external and internal cast iron parts are warranted for a period of three years.

Note: On porcelain enamel finished external parts and accessories The Company offers no Warranty on chipping of enamel surfaces. Inspect all product prior to accepting it for any damage to the enamel.

The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off.

Dye lot variations with replacement parts and/or accessories can occur and are not covered by warranty.

GLASS DOORS: Glass doors are covered for a period of one year. Glass doors are not warranted for breakage due to misuse or accident. Glass doors are not covered for discoloration or burned in stains due to environmental issues, or improper cleaning and maintenance.

BRASS PLATED PARTS AND ACCESSORIES: Brass parts should be cleaned with Lemon oil only. Brass cleaners cannot be used. Mortar mix and masonry cleaners may corrode the brass finish. The Company will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

GAS VALVES: Gas valves are covered for a period of one year

ELECTRONIC AND MECHANICAL COMPONENTS: Electronic and mechanical components of the burner assembly are covered for one year. All steel tube burners are warranted for one year.

ACCESSORIES: Unless otherwise noted all components and CFM Corporation company supplied accessories are covered for a period of one year.

CONDITIONS AND LIMITATIONS

- This new Vermont Castings or Majestic product must be installed by a competent, authorized, service contractor. A licensed technician, as prescribed by the local jurisdiction must perform any installation/service work. It must be installed and operated at all times in accordance with the Installation and Operating instructions furnished with the product. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.
- The customer must pay for any Authorized Dealer in-home travel fees or service charges for in-home repair work. It is the dealers option whether the repair work will be done in the customer's home or in the dealer's shop.
- If upon inspection, the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer parts and/or labor.
- Any part and/or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- This warranty is limited to the repair of or replacement of part(s) found to be defective in material or workmanship, provided that such part(s) have been subjected to normal conditions of use and service, after said defect is confirmed by the Company's inspection.
- The company may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s)
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise of same, will not be covered by this warranty, nor shall the Company assume responsibility for same. Further, the Company will not be responsible for any incidental, indirect, or consequential damages except as provided by law.
- SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- All other warranties-expressed or implied- with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings or Majestic product
- The warranties as outlined within this document do not apply to chimney components or other non CFM Corporation accessories used in conjunction with the installation of this product..
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:
  a) Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.
  b) Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.
- This warranty is void if:
  a) The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
  b) The fireplace has been subjected to prolonged periods of dampness or condensation
  c) Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation.
  d) Any alteration, willful abuse, accident, or misuse of the product has occurred.

IF WARRANTY SERVICE IS NEEDED…

1) Contact your supplier. Make sure you have your warranty, your sales receipt, and the model/serial number of your CFM Corporation product.
2) DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

NATIONAL FIREPLACE INSTITUTE®
NFI
CERTIFIED
www.nficertified.org

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

CFM Corporation

2695 Meadowvale Blvd. • Mississauga, Ontario, Canada L5N 8A3
800-668-5323 • www.cfmcorp.com